

1 51. (Amended) [The method claimed in claim 1, wherein said step of
2 preprocessing said data at said central broadcast server, further comprising the step
3 of:] A method for transmitting data to selected remote computing devices,
4 comprising the steps of:

5 transmitting data from an information source to a central broadcast server;
6 preprocessing said data at said central broadcast server, further comprising
7 the step of:

8 providing data to servers in said central broadcast server;
9 parsing said data with parsers corresponding to said servers;
10 transmitting said data to [said] a content manager for determining how
11 said data is handled;

12 transmitting said data from said content manager to [said] an
13 information gateway for building data blocks and assigning addresses to said data
14 block; and

15 transmitting said data blocks from said information gateway to [said]
16 a transmission gateway for preparing said data block for transmission to [said]
17 receivers;

18 transmitting preprocessed data to receivers communicating with said
19 computing devices; and

20 instantaneously notifying said computing devices of receipt of said
21 preprocessed data whether said computing devices are on or off.

1 53. (Amended) The method claimed in claim [54] 37, further comprising
2 the step of:
3 utilizing a remote control interface for controlling said viewers.

Please add new claims 82-155 as follows:

1 ~~82.~~ The method claimed in claim 8, wherein said single function comprises a
2 single click on said computing device.

1 83. The method claimed in claim 82, wherein said computing device comprises
2 a computer.

1 ~~84.~~ The method claimed in claim ~~51~~, wherein said step of transmitting
2 preprocessed data to remote receivers communicating with said computing devices,
3 further comprises the step of:
4 wirelessly transmitting said preprocessed data to remote receivers.

1 ~~85.~~ The method claimed in claim ~~84~~, wherein said step of wirelessly transmitting
2 said preprocessed data to remote receivers further comprises the step of:
3 transmitting said preprocessed data utilizing a paging network.

1 ~~86.~~ The method claimed in claim ~~84~~, wherein said step of wirelessly transmitting
2 said preprocessed data to remote receivers further comprises the step of:
3 transmitting said preprocessed data utilizing a Vertical Blanking Interval.

1 ~~87.~~ The method claimed in claim ~~84~~, wherein said step of wirelessly transmitting
2 said preprocessed data to remote receivers further comprises the step of:
3 transmitting said preprocessed data utilizing a satellite system.

1 ~~88.~~ The method claimed in claim ~~51~~, wherein said step of transmitting
2 preprocessed data to remote receivers communicating with said computing devices,
3 further comprises the step of:

4 transmitting said preprocessed data to remote receivers by wired
5 transmission.

1 89. The method claimed in claim 51, wherein said step of preprocessing data
2 at said central broadcast server, further comprises the step of:
3 attaching to said preprocessed data an Internet address location of said
4 preprocessed data for providing to said user an automatic connection back to
5 said information source for obtaining further information related to said
6 preprocessed data.

1 90. The method claimed in claim 89, wherein said Internet address location is
2 a Uniform Resource Locator.

1 91. The method claimed in claim 89, wherein said step of attaching to said
2 preprocessed data an Internet address location of said preprocessed data for
3 providing to said user an automatic connection back to said information source
4 for obtaining further information related to said preprocessed data, further
5 comprises the step of:
6 providing an automatic connection back to said information source
7 through an user activating a single function on said computing device.

1 92. The method claimed in claim 91, wherein said single function comprises a
2 single click on said computing device.

13 93. The method claimed in claim 89, wherein said connection back to said
2 information source for obtaining further information related to said preprocessed
3 data is an automated wired connection.

14 94. The method claimed in claim 89, wherein said connection back to said
2 information source for obtaining further information related to said preprocessed
3 data is an automated wireless connection.

15 95. The method claimed in claim 89, wherein said step of attaching to said
2 preprocessed data an Internet address location of said preprocessed data for
3 providing to said user an automatic connection back to said information source
4 for obtaining further information related to said preprocessed data, further
5 comprises the step of:
6 determining at said central broadcast server said Internet address location
7 from said information source.

16 96. The method claimed in claim 89, wherein said step of attaching to said
2 preprocessed data an Internet address location of said preprocessed data for
3 providing to said user an automatic connection back to said information source
4 for obtaining further information related to said preprocessed data, further
5 comprises the step of:
6 attaching said Internet address location to said preprocessed data.

17 97. The method claimed in claim 89, wherein said step of attaching to said
2 preprocessed data an Internet address location of said preprocessed data for
3 providing to said user an automatic connection back to said information source
4 for obtaining further information related to said preprocessed data, further
5 comprises the step of:

6 transmitting said Internet address location with said preprocessed data to
7 said computing device.

1 ¹⁸ 98. The method claimed in claim ⁸⁹, further comprising the step of:
2 extracting said Internet address location from said preprocessed data at
3 said computing device.

1 ¹⁹ 99. The method claimed in claim ⁸⁹, further comprising the step of:
2 displaying said Internet address location with said preprocessed data to
3 said user such that said user can with a single click on said Internet address
4 location to obtain additional information from said information source.

1 ²⁰ 100. The method claimed in claim ⁸⁹, further comprising the step of:
2 launching an Internet browser and passing said Internet address location
3 to said browser for automatic connection back to said information source.

1 ²² 101. The method claimed in claim ⁵¹, wherein said step of instantaneously
2 notifying said computing devices of receipt of said preprocessed data whether
3 said computing devices are on or off, further comprises the step of:
4 providing at least one alert which when activated allows display of data.

1 ²³ 102. The method claimed in claim ¹⁰¹, wherein said at least one alert
2 comprises a visual alert.

1 ²⁴ 103. The method claimed in claim ¹⁰¹, wherein said at least one alert
2 comprises an audio alert.

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1 104. The method claimed in claim 51, wherein said step of instantaneously
2 notifying said computing devices of receipt of said preprocessed data whether
3 said computing devices are on or off, further comprises the step of:
4 providing a dockable user interface alert panel on a display
5 communicating with computing device for providing alerts to said user, wherein
6 said alert panel is dockable on top of other applications.

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1 105. The method claimed in claim 104, wherein said step of providing a
2 dockable user interface alert panel on a display communicating with computing
3 device for providing alerts to said user, further comprises the step of:
4 displaying fly-in graphics and icon buttons to alert said user that new data
5 has been received by said computing device.

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1 106. The method claimed in claim 101, wherein said at least one alert is related
2 to type of information present at computing device.

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1 107. The method claimed in claim 51, wherein said step of preprocessing said
2 data at said central broadcast server further comprises the step of:
3 deriving redundant data packets for transmission to said user.

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1 108. The method claimed in claim 107, wherein said step of deriving redundant
2 data packets for transmission to said user further comprises the step of:
3 parceling a data block into at least one incoming message.

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1 109. The method claimed in claim 108, wherein said step of deriving redundant
2 data packets for transmission to said user further comprises the step of:
3 parceling said messages into k information packets.

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1 110. The method claimed in claim 109, wherein said step of deriving redundant
2 data packets for transmission to said user further comprises the step of:
3 selecting a number of parity-check packets p.

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1 111. The method claimed in claim 110, wherein said step of deriving redundant
2 data packets for transmission to said user further comprises the step of:
3 encoding column-wise with a modified Reed-Solomon code for generating
4 parity-check packets.

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1 112. The method claimed in claim 111, wherein said Reed-Solomon code is
2 defined in accordance with:

3 P
A 3 10729X 5
4 g(x) = $\prod_{i=1}^n (x + a^i)$

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1 113. The method claimed in claim 111, wherein said step of deriving redundant
2 data packets for transmission to said user further comprises the step of:
3 parceling said data packets into code words for transmission to said user.

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1 114. The method claimed in claim 107, wherein said data packets include
2 information packets and parity-check packets.

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1 115. The method claimed in claim 113, wherein said step of deriving redundant
2 data packets for transmission to said user further comprises the steps of:
3 performing error correction and detection on said code words after said
4 data packets have been parceled.

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1 116. The method claimed in claim 113, further comprising the step of:

2 assembling a data block from said code words.

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1 117. The method claimed in claim 116, wherein said step of assembling a data
2 block from said code words further comprises the step of:
3 counting the number of code words which have errors;
4 determining whether each packet has any errors;
5 saving packets without error;
6 discarding packets with at least one error; and
7 assembling a message when the required number of packets has been
8 received.

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3 118. The method claimed in claim 51, wherein said step of preprocessing said
2 data at said central broadcast server further comprises the step of:
3 combining Huffman compression and the dictionary-based compression
4 based algorithms.

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1 119. The method claimed in claim 118, wherein said step of combining
2 Huffman compression and the dictionary-based compression based algorithms
3 further comprises the steps of:
4 scanning input texts;
5 searching for next item previously seen text;
6 searching for next item in a static Huffman dictionary; and
7 choosing said search method which produces a better result for
8 compression.

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1 120. The method claimed in claim 119, further comprising the step of:
2 decompressing said compressed data.

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1 121. The method claimed in claim 51, wherein said step of preprocessing said
2 data at said central broadcast server further comprises the step of:
3 utilizing a differencing algorithm for compressing said coded data, thereby
4 significantly reducing the number of bytes sent with each transmission.

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1 122. The method claimed in claim 51, wherein said step of preprocessing data
2 at said central broadcast server, further comprises the step of:
3 processing data in accordance with feed type from said information
4 source.

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1 123. The method claimed in claim 122, wherein said feed type comprises
2 binary type feeds.

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1 124. The method claimed in claim 122, wherein said feed type comprises
2 common user information type feeds.

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1 125. The method claimed in claim 122, wherein said feed type comprises feeds
2 for modifying registry keys which control processing of data.

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1 126. The method claimed in claim 122, wherein said step of processing data in
2 accordance with feed type from said information source, further comprises the
3 step of:
4 using tags to differentiate types of information.

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1 127. The method claimed in claim 51, wherein said step of instantaneously
2 notifying said computing devices of receipt of said preprocessed data whether
3 said computing devices are on or off, further comprises the step of:

4 instantaneously alerting said user to personal alerts through the use of
5 sound, graphics, bit maps or video, wherein said user can instantaneously
6 access information.

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1 128. The method claimed in claim *51*, wherein said step of preprocessing data
2 at said central broadcast server, further comprises the step of:
3 encoding said data with information relating to message parameters for
4 filtering.

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1 129. The method claimed in claim *51*, wherein said step of instantaneously
2 notifying said computing devices of receipt of said preprocessed data whether
3 said computing devices are on or off, further comprises the steps of:
4 monitoring said transmissions utilizing multiple viewers;
5 filtering said transmitted preprocessed data;
6 post processing said preprocessed data; and
7 notifying said user instantaneously of receipt of filtered postprocessed
8 data.

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1 130. The method claimed in claim *129*, wherein said step of filtering said
2 transmitted preprocessed data further comprises the step of:
3 filtering said transmitted preprocessed data in accordance with
4 preferences set by said user.

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1 131. The method claimed in claim *130*, wherein said step of filtering said
2 transmitted preprocessed data in accordance with preferences set by said user,
3 further comprises the step of:
4 setting said preferences with respect to sound, video and animation.

1 *63* 132. The method claimed in claim *129*, wherein said step of filtering said
2 transmitted preprocessed data further comprises the step of:
3 filtering said preprocessed data in accordance with virtual addresses.

1 *54* 133. The method claimed in claim *129*, wherein said step of filtering said
2 transmitted preprocessed data further comprises the step of:
3 filtering said preprocessed data in accordance with physical addresses.

1 *50* 134. The method claimed in claim *129*, further comprising the step of:
2 controlling said viewers from said central broadcast server.

3 *61* 135. The method claimed in claim *51*, further comprising the step of:
1 activating said preprocessed data at a scheduled time.

1 *62* 136. The method claimed in claim *51*, further comprising the step of:
2 modifying said preprocessed data instantaneously and wirelessly.

1 *63* 137. The method claimed in claim *136*, wherein said step of modifying said
2 preprocessed data instantaneously and wirelessly, further comprises the step of:
3 activating services wirelessly through activation codes which enable or
4 disable services.

1 *56* 138. The method claimed in claim *134*, wherein said step of controlling said
2 viewers from said central broadcast server, further comprises the step of:
3 adding viewers from said central broadcast server.

1 *67* 139. The method claimed in claim *134*, wherein said step of controlling said
2 viewers from said central broadcast server, further comprises the step of:
3 removing viewers from said central broadcast server.

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1 *64* 140. The method claimed in claim *51*, further comprising the step of:
2 postprocessing said preprocessed data.

1 *65* 141. The method claimed in claim *140*, wherein said step of postprocessing
2 said preprocessed data further comprises the step of:
3 recombining, decoding and decompressing said preprocessed data.

1 *66* 142. The method claimed in claim *51*, wherein said information source may be
2 an Internet access provider providing data feeds.

1 *67* 143. The method claimed in claim *51*, wherein said information source may be
2 an on-line service provider providing data feeds.

1 *68* 144. The method claimed in claim *51*, wherein said step of transmitting said
2 data from said content manager to said information gateway for building data
3 blocks and assigning addresses to said data block, further comprises the step of:
4 building data blocks and assigning addresses to said data block based on
5 information in a subscriber database.

1 *69* 145. The method claimed in claim *129*, further comprising the step of:
2 utilizing a remote control interface for controlling said viewers.

1 *70* 146. The method claimed in claim *145*, wherein said step of utilizing a remote
2 control interface for controlling said viewers further comprises the step of:
3 launching said remote control interface through a user interface alert
4 panel.

1 *71* 147. The method claimed in claim *129*, further comprising the step of:

2 storing entries in a viewer server connected to said viewer; and
3 providing filtering means for filtering particular types of messages a viewer
4 can look at.

1 148. The method claimed in claim 51, further comprising the step of:
2 displaying contextual graphics on said computing device to show data in a
3 predefined format.

1 149. The method claimed in claim 148, wherein said predefined format is a
2 scoreboard.

1 150. The method claimed in claim 51, wherein said step of preprocessing data
2 at said central broadcast server, further comprises the step of:
3 attaching to said preprocessed data an Internet address location of said
4 preprocessed data for providing to said user a message that causes a process or
5 transaction on said computing device to occur.

1 151. The method claimed in claim 89, wherein said Internet address is a
2 proprietary on-line addressing scheme.

1 ~~152.~~ The method claimed in claim ~~84~~, wherein said step of wirelessly
2 transmitting said preprocessed data to remote receivers further comprises the
3 step of:
4 transmitting said preprocessed data utilizing a FM subcarrier, digital,
5 analog, cellular, GSM or PCS carrier.

1 153. The method claimed in claim 51, wherein said step of preprocessing said
2 data at said central broadcast server, further comprises the step of:
3 sending said data on groups of pooled capcodes.

1 154. The method claimed in claim 153, wherein said step of sending said data
2 on groups of pooled capcodes, further comprises the step of:
3 multiplexing data over multiple capcodes to be reassembled at said user
4 as if data were being sent over a single capcode.

1 155. The method claimed in claim 51, wherein said step of preprocessing said
2 data at said central broadcast server, further comprises the step of:
3 assigning data packets to a group of capcodes;
4 transmitting said data over a paging network using said group of
5 capcodes;
6 receiving packets at said user on said group of capcodes; and
7 combining said packets from group of capcodes into one data message.

-----ADDITIONAL "EMBEDDED URL & ALERT" CLAIMS-----

1 156. A method for transmitting data to a plurality of receivers, comprising the
2 steps of:
3 generating data including an Internet address location; and
4 broadcasting said data including said Internet address location to a user in
5 communication with one of said plurality of receivers, wherein said Internet
6 address location is not broadcast in response to a request for said Internet
7 address location by said user.

1 157. The method claimed in claim 156, further comprising the step of:
2 providing said user with a direct connection to said location identified by
3 said Internet address location.

1 158. The method claimed in claim 157, further comprising the step of:

2 providing notification of said Internet address location to said user in
3 communication with one of said plurality of receivers.

1 159. The method claimed in claim 156, wherein said Internet address location
2 is a Uniform Resource Locator.

1 160. The method claimed in claim 157, wherein said step of providing said user
2 with a direct connection to said location identified by said Internet address
3 location, further comprises the step of:

4 providing a connection to said location through said user activating a
5 single function on said remote device.

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A 1 161. The method claimed in claim 160, wherein said single function comprises
2 a single click on said remote device.

1 162. The method claimed in claim 157, wherein said step of providing said user
2 with a direct connection to said location identified by said Internet address
3 location, further comprises the step of:

4 providing a wireless connection to said location for said user to obtain
5 further information.

1 163. The method claimed in claim 157, wherein said step of providing said user
2 with a direct connection to said location identified by said Internet address
3 location, further comprises the step of:

4 providing a wired connection to said location for obtaining further
5 information.

1 164. The method claimed in claim 156, wherein said step of generating data
2 including an Internet address location, further comprises the step of:

3 determining at a server said Internet address location from a source
4 providing information to said server.

1 165. The method claimed in claim 164, wherein said step of generating data
2 including an Internet address location, further comprises the step of:
3 attaching said Internet address location to said data.

1 166. The method claimed in claim 165, wherein said step of attaching said
2 Internet address location to said data, further comprises the step of:
3 embedding said Internet address location within said data.

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1 167. The method claimed in claim 156, further comprising the step of:
2 extracting said Internet address location from said data at said plurality of
3 remote devices.

1 168. The method claimed in claim 158, wherein said step of providing
2 notification of said Internet address location to said user in communication with
3 one of said plurality of receivers, further comprises the step of:
4 displaying said Internet address location to said user on one of said
5 plurality of receivers.

1 169. The method claimed in claim 168, wherein said step of displaying said
2 Internet address location to said user on one of said plurality of receivers, further
3 comprises the step of:
4 utilizing a single click on said Internet address location to obtain additional
5 information from said information source.

1 170. The method claimed in claim 157, wherein said step of providing said user
2 with a direct connection to said location identified by said Internet address
3 location, further comprises the step of:

4 launching an Internet browser and passing said Internet address location
5 to said browser for automatic connection back to said location.

1 171. The method claimed in claim 156, wherein said Internet address location
2 corresponds to a location on the World Wide Web.

1 172. The method claimed in claim 158, wherein said step of providing
2 notification of said Internet address location to said user in communication with
3 one of said plurality of receivers, further comprises the step of:

4 providing an alert to said user in communication with said at least one
5 remote device.

1 173. The method claimed in claim 172, further comprising the step of:
2 activating said alert to obtain additional information from an information
3 source.

1 174. The method claimed in claim 156, wherein said at least one remote device
2 comprises a paging device.

1 175. The method claimed in claim 172, wherein said alert comprises a visual
2 alert.

1 176. The method claimed in claim 175, wherein said visual alert comprises the
2 text of the Internet address location.